# REQUEST FOR PROPOSALS for Consultant Services

# WINE COUNTRY INTERREGIONAL PARTNERSHIP TRAVEL DEMAND MODEL

IN

LAKE, MENDOCINO, SONOMA, & NAPA COUNTIES

for the

Lake County City Area Planning Council



#### **I. INTRODUCTION**

The California Department of Transportation (Caltrans) has secured funding for the development of an integrated interregional travel demand model (TDM) that will encompass the four-county "Wine Country Interregional Partnership" (WCIRP) area, including Lake, Mendocino, Napa, and Sonoma counties. Caltrans, in coordination with local and regional planning agencies from Lake, Mendocino, Napa, and Sonoma counties has recognized the need for travel demand forecasting capabilities to predict changes in travel patterns and the utilization of the transportation system in response to changes in regional development, demographics, and transportation supply. The project will be administered through the Lake County City/Area Planning Council (APC).

#### **II. SUMMARY**

The Wine Country region has developed its own interrelated economy that functions separately from San Francisco Bay Area economy. Over the past several years, its economy has grown at a faster rate than the Bay Area and California in all measures of employment, population, and housing, which has resulted in increasing traffic. In some cases, inter-county work commute trips have more than tripled over the past 15 years. This modeling effort is being proposed to assist in addressing these issues and problems associated with increased traffic.

This modeling effort will be the third phase of an ongoing project. Phase I was the implementation of the WCIRP work program. Phase II was an Origin & Destination study to obtain information on travel behavior. This project encompasses development of a TDM utilizing TransCAD software. TransCAD is a Geographic Information System package designed specifically for use by transportation professionals to store, display, manage, and analyze transportation data through macro-simulation modeling. The total project area includes all four counties in the WCIRP. The selected consultant (CONSULTANT) will work in coordination with the WCIRP Technical Advisory Group (TAG) to determine appropriate facilities to include in the TDM. The proposed project will be prepared using the latest version of TransCAD and it is expected that tasks under this phase will be performed in a manner that is compatible with use of this GIS tool for the purposes of analysis, display and mapping. The CONSULTANT will develop a validated weekday, peak period (am & pm) model for a base year and a thirty (30) year buildout year and intermediate year(s) not to exceed two. The base year and buildout year are yet to be determined.

A summary of existing travel models for Lake, Mendocino, Napa, and Sonoma counties, as well as the Baycast-90 model, is provided in Exhibit D. Included is a brief description of each model's software platform, geographic scope, base year and forecasted analysis periods, data collected, and other information useful to potential bidders on this contract.

A consultant will be hired to collaborate with the WCIRPTAG to:

• Create the Wine Country Interregional Travel Demand Forecasting Model (WCIRPTDM), including some additional data collection (to be identified) and

• Train staff to use, code, error-check, calibrate, and modify the model.

Caltrans will assign a Project Manager to oversee the project and approve invoicing, monitor technical tasks, and organize the TAG.

#### III. PURPOSE

The purpose of this project is to provide useful and reliable traffic forecasting for the Wine Country region. The WCIRPTDM project will:

- Allow Caltrans and other local decision-makers in the region to plan for increased traffic on a system-wide scale.
- Assist in helping to alleviate the housing imbalance as well as provide information for decision-makers,
- Provide a way of testing alterative improvement scenarios to determine their effectiveness in reducing traffic congestion and improving safety on roads in the WCIRP region,
- Help identify improvements necessary to provide reasonable travel times for trips through the WCIRP region for both existing and future traffic volumes,
- Assist in evaluating proposed traffic mitigation for major developments,
- Provide training for Caltrans and partner agencies staff in the development, use, and maintenance of travel demand forecasting models utilizing TransCAD, and
- Execute forecasts of travel, including but not limited to, forecasts of highway volumes, major and minor arterials and when applicable, transit ridership, and truck movements.

#### IV. SCOPE OF WORK

#### BASE YEAR MODEL DEVELOPMENT

The following Scope of Work outlines tasks that will be completed for development of the WCIRPTDM base year model, although prospective bidders are encouraged to propose other tasks. The CONSULTANT will work with the WCIRPTAG to determine the exact year of the base year model.

#### Task 1 PROJECT SCOPE

- **1.1** Scoping Meeting
- **1.2** WCIRPTAG Meetings

| Description of Task  | Deliverable                                 |
|--|---|
| 1.1 CONSULTANT will meet w/WCIRPTAG to discuss                     | Meeting Minutes including description of    |
| understanding of the project, scope of each task, schedules,       | core structure of the regional network &    |
| meeting dates/times, communication formalities, proposal of an     | general model standards, action items, etc. |
| initial network structure (including project limits) general model |   |
| standards (including reasonableness, checks of modules, base year  |   |
| calibration, and validation of future years), and training.        |   |
| <b>1.2</b> During the course of project development the CONSULTANT | Meeting Minutes including status reports.   |
| will be required to meet w/WCIRPTAG a minimum of 8 times to        |   |
| provide status reports and updates.                                |   |

#### Task 2 DATA COLLECTION AND BASE YEAR MODEL DEVELOPMENT

- **2.1** Data Plan Data Compilation & Needs Assessment
- **2.2** Collect Field Data
- 2.3 Traffic Analysis Zone System & Roadway Network Development and Coding
- **2.4** Trip Generation
- **2.5** Trip Distribution
- **2.6** Modal Choice
- **2.7** Trip Assignment
- **2.8** Model Calibration

| Description of Task   | Deliverable                     |
|---|---------------------------------|
| <b>2.1</b> CONSULTANT will meet w/ Caltrans staff and WCIRPTAG to confirm           | Meeting minutes summarizing     |
| the scope of this task. Consultant will develop a Data Plan with a detailed         | existing data & their           |
| explanation of what data already exists and identify additional data needed to      | adequacy, existing models,      |
| complete the TDM. All available & applicable data/studies/background                | list of additional data needed, |
| information will be identified & reviewed by CONSULTANT. A detailed                 | proposal on trip types, major   |
| review of the existing Wine Country Origin Destination Study shall be               | industrial sectors, modal       |
| conducted and improvements made where applicable. CONSULTANT will                   | periods, & assessment of        |
| propose the number of trip purposes to be included in the model & industrial        | modes.                          |
| classification groups, and travel modes (single occupant, etc.). WCIRPTAG           |                                 |
| expects the model to project peak hour (am & pm) weekday traffic, daily             |                                 |
| vehicular and truck traffic volumes, forecasts of highway volumes for all           |                                 |
| principal, major and minor arterials for each peak period, and forecasts for        |                                 |
| weekend traffic should be provided.   |                                 |
| <b>2.2</b> CONSULTANT will collect additional field data identified in Task 2.1. It | 1                               |
| is the responsibility of the CONSULTANT to collect additional data as needed        |                                 |
| 2.3 CONSULTANT will work with Caltrans staff and WCIRPTAG to develop                |                                 |
| a mutually agreed upon and recognized TAZ system based on local general             | Roadway Network for the         |
| plans, known land uses, and roadway network reflecting current system               | base year in both electronic    |
| characteristics. CONSULTANT will refine core network structure identified in        | 1 2                             |
| Task 1.1. Addition of roads and links will be identified. Key attributes to be      | digital files.                  |
| coded for each link include speed, capacity, distance, number of lanes, &           |                                 |
| popular road name/route number. Traffic counts & turning penalties will also        |                                 |
| be coded as part of the roadway network for use in calibration & post-              |                                 |
| processing. While the WCIRPTAG is not asking for development of a transit           |                                 |
| network at this time, the model should be developed in a way that allows            |                                 |
| incorporation at a later date. CONSULTANT will work with Caltrans District          |                                 |
| 1 staff and WCIRPTAG to carry out and document standard network & TAZ               |                                 |
| calibration procedures for the base year free-flow condition to assure full         |                                 |
| functionality.  |                                 |
|   | Trip rates for the base year    |
| <b>2.4</b> CONSULTANT will work with Caltrans staff and WCIRPTAG to develop         |                                 |
| trip rates to be used in the WCIRPTDM. Sources to be consulted include              | reasonableness checks.          |
| publications from ITE, FHWA, and Caltrans. Alternative trip generation              | Production-Attraction           |
| methodologies may be proposed by the CONSULTANT but must be justified.              | electronic files.               |
| <b>2.5</b> CONSULTANT will provide a trip distribution methodology and develop      | Trip Origin-Destination         |
| matrices. Trip matrices shall be developed for peak hour (am & pm) weekday          | matrices in electronic format.  |
| traffic. CONSULTANT will propose their approach that will be used to select         | Report documenting              |
| a methodology as well as describe how they will deal with standard                  | methodology, reasonableness     |

|   | checks & adjustments.          |  |
|---|--------------------------------|--|
| will also calibrate and validate the trip distribution model as determined by the |                                |  |
| general model standards agreed upon in Task 1.1.                                  |                                |  |
| <b>2.6</b> CONSULTANT will work with Caltrans staff and WCIRPTAG to develop       | Mode choice model              |  |
| an appropriate methodology to estimate & incorporate into the model a means       | w/estimates for the base year, |  |
| of addressing trips by alternate modes.   | in electronic format. Report   |  |
|   | documenting model              |  |
|   | development &                  |  |
|   | reasonableness checks.         |  |
| 2.7 CONSULTANT will provide a trip assignment methodology for peak hour           | Network loaded w/peak hour     |  |
| (am & pm) weekday traffic. The model should provide vehicle flows &               | weekday traffic flows in       |  |
| turning movements at major intersections. Further, the capability to estimate     | electronic format. Report      |  |
| HOV flows and the ability to interface w/micro-simulation models should not       | documenting methodology,       |  |
| be precluded by the chosen methodology.   | reasonableness checks &        |  |
|   | adjustments.                   |  |
| <b>2.8</b> CONSULTANT will calibrate the base year model developed in the above   | Calibrated model in electronic |  |
| tasks. CONSULTANT will work with Caltrans staff and WCIRPTAG to: 1)               | form. Fully documented         |  |
| select suitable target values for the adopted calibration measures and 2)         | calibration procedure &        |  |
| perform & report the calibration.   | adjustments, including         |  |
|   | implications for model use.    |  |
|   | List & description of          |  |
|   | input/output files.            |  |

#### **FUTURE YEAR MODEL DEVELOPMENT**

In addition to the base year model, the CONSULTANT will develop models for a 30-year buildout year and intermediate year(s) not to exceed two. The CONSULTANT will work with the WCIRPTAG to determine the 30-year buildout year and intermediate year(s).

#### Task 3 TAZ & NETWORK DEVELOPMENT & CODING

- **3.1** Future Year Networks & Zone Structures
- **3.2** Trip Generation
- **3.3** Trip Distribution
- 3.4 Modal Choice
- **3.5** Trip Assignment
- **3.6** Model Validation

| Description of Task   | Deliverable                               |
|---|---|
| <b>3.1</b> CONSULTANT, with input from the WCIRPTAG, will create  | Documentation of the projects included in |
| forecast year networks & zone structures. Forecast TAZs should be | the future year network and the zone      |
| based on current and accepted land use projections and/or local   | structure. Fully functional & verify TAZ  |
| general plans, and must be developed in consultation with the     | & roadway networks for future years in    |
| WCIRPTAG. CONSULTANT will work w/Caltrans staff and               | both electronic & hard copy format.       |
| WCIRPTAG to carry out and document standard network & TAZ         | Documentation of assumptions &            |
| validation procedures for the free-flow condition to assure full  | methodology used in determining the       |
| functionality. The development of forecasts should support not    | TAZ systems & networks.                   |
| only the comparative evaluation of proposed route alignment       |   |

| alternatives but should serve more generally to help the assessment    |   |
|--|---|
| of investment of traffic operations strategies and to support          |   |
| decision making processes. The model should be developed in a          |   |
| way that allows incorporation of a transit network at a later date.    |   |
|  | Trip rates for future years including         |
|  | documentation & reasonableness checks.        |
|  | Production-Attraction electronic files for    |
|  | each of the future years.                     |
| methodology and rates used in Task 2.4 shall be justified &            | cach of the fatare years.                     |
| documented.  |   |
|  | Trip Origin-Destination matrices for each     |
|  | of the future years in electronic format.     |
|  | Report documenting methodology,               |
|  | adjustments & reasonableness checks.          |
| the criteria to be used to gauge the reasonableness of future years'   | adjustinoms & reasonasieness encens.          |
| origin-destination matrices.   |   |
|  | Mode choice model w/estimates for each        |
|  | of the future years in electronic format.     |
| WCIRPTAG to develop an appropriate methodology to estimate &           |   |
| incorporate into the model a means of addressing trips by alternate    |   |
|  | checks.                                       |
| <b>3.5</b> CONSULTANT will provide a trip assignment methodology       | Network loaded w/peak hour weekday            |
|  | traffic flows for each of the future years in |
| provide vehicle flows & turning movements at major intersections.      |   |
|  | methodology, reasonableness checks &          |
| interface w/micro-simulation models should not be precluded by         | adjustments.                                  |
| the chosen methodology. The proposal should describe how the           |   |
| CONSULTANT would prepare future trip assignments as well as            |   |
| criteria used to gauge the reasonableness of the assignments.          |   |
| <b>3.6</b> CONSULTANT's proposal should address the reasonableness     | Final documentation (including code &         |
| of future forecasts & the criteria used to validate the model's future |   |
| scenarios. The future scenarios will be based upon current highway     |   |
|  | Manuals for all TAG Members, training         |
| Transportation Plans and proposed highway projects in the current      | documents.                                    |
| State Transportation Improvement Plan.                                 |   |

#### Task 4 ACCEPTANCE BY APPROPRIATE BOARDS

#### **4.1** Model Outputs

| Description of Task  | Deliverable                                |
|--|--|
| <b>4.1</b> CONSULTANT will assist Caltrans staff and WCIRPTAG in | Output for board presentations in a format |
| preparing output necessary to gain board acceptances of the      | conducive for public display &             |
| developed model. Output shall be conducive for public display &  | examination.                               |
| examination. Revisions may be needed to obtain model approval.   |  |

## Task 5 FINAL DOCUMENTATION, CREATION OF MODEL USERS MANUAL, & STAFF TRAINING

- **5.1** Model development training
- **5.2** "Hands-on" training for macro-simulation model
- **5.3** Follow-up training, by phone or in person

| Description of Task   | Deliverable                            |
|---|--|
| 5.1 On-going integration between CONSULTANT and Caltrans staff          | Report monthly to Caltrans. Submit all |
| while the WCIRPTDM is being developed                                   | Data files, current model status, &    |
|   | weekly status updates                  |
| <b>5.2</b> CONSULTANT will produce a detailed, clear, & user friendly   | Final documentation, 3 Users Manuals   |
| Users Manual. CONSULTANT will train Caltrans staff and                  | for all TAG Members, training          |
| WCIRPTAG to be able to maintain and update the TDM. Training            | documents                              |
| will include at a minimum 16 hours of training (four 4-hour sessions)   |  |
| on operation of the WCIRPTDM. Schedule of training sessions will        |  |
| be determined at the scoping meeting.                                   |  |
| <b>5.3</b> 8 hours maximum follow-up consultation over a 6 month period | Summary of Training Provided           |

**Note:** The work scope outlined above identifies those elements that must be addressed at this time. This outline is not intended to be exhaustive, nor does it necessarily include every work element that may be required to successfully satisfy the project objective. Any additional tasks or modifications that prospective consultants may recommend or deem appropriate or necessary should be identified separately & described in their submittals.

#### Task 6 ADMINISTRATIVE COORDINATION

#### **6.1** Project Management

| Description of Task                               | Deliverable  |
|---|--|
| <b>6.1</b> CONSULTANT shall provide the           | Establishing contractual arrangements with CONTRACTOR, monitoring        |
| necessary resources and services to execute the   | consultant work, participating in public events, coordinating all        |
|   | communication & correspondence between participating agencies, assist in |
| •   | providing existing relevant data, reports, & plans, provide timely       |
|   | responses & comments to draft documents, coordinate meetings with        |
|   | WCIRPTAG, processing invoices, reviewing deliverables and                |
| $\mu$ $\gamma$ $\epsilon$                         | documentation, etc.  |
| and coordination of all activities related to the |  |
| scope of work.                                    |  |
|   |  |
|   |  |

#### V. PROPOSAL REQUIREMENTS

Proposals should include, but are not limited to the following:

#### A. <u>Project Understanding</u>

Provide a brief response that demonstrates an understanding of the project. This should include potential risks and opportunities of a study based primarily on a consensus building effort involving diverse interest groups.

#### B. Project Team

Identify the person to be designated project manager and give a detailed summary of their background. The project manager shall be expected to be available for discussions with the Caltrans Project Manager staff. The Caltrans Project Manager, with concurrence by the Management Committee, shall approve any change in project manager.

Submit an organizational chart showing the name of the project manager and all other personnel and supporting staff to be assigned to the project. Those who are named must be those who participate in the work program. Indicate the anticipated total effort, expressed in percentages of person-hours to be provided by each member of the supporting professional staff.

#### C. Qualifications

Discuss overall qualifications of the firm. Include a brief description of the firm's philosophy, history, recent and relevant experience and organizational structure. Discuss how many similar projects your firm has completed within the last five years. Similar information should be provided for each subcontractor. Provide an organization chart that graphically portrays how the project will be staffed and the chain of command. Please provide resumes for each individual on the chart highlighting qualifications relevant to their performance of each task. Specific responsibilities of the project manager and other key personnel should be detailed.

#### D. Work Products

The consultants will be required to verify and defend that all information submitted as services rendered is accurate and current. Furthermore, the consultant will be required to document the source(s) of all compiled information. Caltrans shall gain ownership of all work products prepared by the consultant for this study.

The consultant will produce and deliver the following:

- Ten (10) Copies of the Final Report
- Six (6) Copies of the Digital Files
- Presentation Materials
- Displays and products used in Project Presentations
- Graphic Computer Presentation suitable for staff presentations to decision makers and public

#### E. Schedule

Present a comprehensive schedule to complete the project within 32 months of the project start date. Identify specific milestones; the project is not to extend past February 28, 2011.

#### F. Budget

-

Provide an itemized cost breakdown, indicating the total time and expenditures for each of the major tasks in the scope of work. A total cost for the proposed scope of work, and the hourly rate and estimated number of hours for all personnel and support staff participating in the project, shall be provided. The cost for attendance at additional meetings should also be shown.

#### G. References

List former clients for whom similar or comparable services have been performed. Include names, along with mailing address and telephone number of a principal representative. The former clients may be contacted to discuss their experience with the project manager and key team members.

#### H. Work Samples

Please provide a sample of similar work completed.

#### VI. PROPOSAL SUBMITTAL

Questions regarding this RFP should be directed to Brandon Williams, California Department of Transportation (707) 445-5219 or Rex Jackman (707) 445-6412. **Seven** copies of your firm's proposal are due no later than **4:00 p.m. on December 1st, 2008**.

Deliver proposals to:

California Department of Transportation Attn: Brandon Williams WCIRP Travel Demand Model P.O. Box 3700 Eureka, CA 95502-3700

**Key Action Dates: Consultant Selection** 

| RFP Available to Prospective Proposers               | D1 Staff             | 10/23/2008 |
|--|----------------------|------------|
|  |                      |            |
| RFP Bidder Question Telephone Conference             | Consultant/D1 Staff  | 11/21/2008 |
| Final Date for RFP Proposal Submission               | Consultant           | 12/1/2008  |
|  | Consultant Selection |            |
| RFP Primary Screening Process (via Telephone)        | Committee            | 12/8/2008  |
|  | Consultant Selection |            |
| RFP Interviews (location to be determined)           | Committee            | 12/22/2008 |
| RFP Consultant Selection Committee Management Review | Consultant Selection |            |
| Meeting & Proposal Award Date                        | Committee            | 12/29/2008 |

#### VII. EVALUATION, SELECTION, and INTERVIEWS

A committee, including representatives from Caltrans and WCIRPTAG, will evaluate each accepted proposal separately.

#### A. Minimum Qualifications for Proposers

- Staff with experience in meeting facilitation (stakeholders with diverse and conflicting interests)
- Adequate staff to conduct a public meeting (estimated attendance 100 people)
- Transportation engineering analysis capability (could be subcontracted)
- Availability for monthly (approximate) meetings in Humboldt or Lake Counties
- Report writing experience
- Demonstrated satisfactory completion of comparable work
- Meet the requirements of the "Agreement for Consulting Services" (attached)

#### B. Evaluation Criteria

- Responsiveness of consultant staff to suggestions/guidance throughout the model development
- Preparation for and facilitation of meetings
- Assessment of how well the completed Travel Demand Forecasting model addressed the Scope of Work based on the following:
- Completeness and conciseness
- Accuracy
- Organization
- Training
- Detail
- A final Travel Demand Forecasting model that is calibrated and well organized
- Deadlines met

#### C. Submission of Proposal

- Proposals should provide straightforward and concise descriptions of the proposer's ability to satisfy the requirements of this RFP. The proposal must be complete and accurate. Omissions, inaccuracies or misstatements will be sufficient cause for rejection of a proposal.
- All proposals must be submitted under sealed cover and sent to California Department of Transportation by dates and times shown in Section V. Proposals received after this date and time will not be considered.
- A minimum of seven (7) hard copies of the proposal must be submitted.
- The original proposal must be marked "ORIGINAL COPY". All documents contained in the original proposal package must have original signatures and must be signed by a person who is authorized to bind the proposing firm. All additional proposal sets may contain photocopies of the original package.
- The following acknowledgment of participation must appear on the cover or title page of a final report due at the conclusion of this project:
  - "The preparation of this report was programmed through the Lake County/City Area Planning Council's 2008/09 Regional Transportation Planning Work Program, Work Element 614."
- The proposal envelopes must be plainly marked with the RFP title, your firm name and address, and must be marked with "DO NOT OPEN", as shown in the following example:

California Department of Transportation Attention: Brandon Williams WCIRP Travel Demand Model P.O. Box 3700 Eureka, CA 95502-3700

#### DO NOT OPEN

- Proposals must be submitted for the performance of all the services described herein. Any
  deviation from the work specifications will not be considered and will cause a proposal to be
  rejected.
- Costs incurred for developing proposals and in anticipation of award of the agreement are entirely the responsibility of the proposer and shall not be charged to the APC or State of California.
- A proposer may modify a proposal after its submission by withdrawing its original proposal and resubmitting a new proposal prior to the proposal submission deadline as set forth in the Key Action Dates. Proposal modifications offered in any other manner, oral or written, will not be considered.
- The awarding agency may modify the RFP prior to the date fixed for submission of proposals by the issuance of an addendum to all parties who received a proposal package.
- The awarding agency reserves the right to reject all proposals. The agency is not required to award an agreement.
- Where applicable, proposer should carefully examine work sites and specifications. No additions or increases to the agreement amount will be made due to a lack of careful examination of work sites and specifications.
- No oral understanding or agreement shall be binding on either party.

#### D. Evaluation Process

- At the time of proposal opening, each proposal will be checked for the presence or absence of required information in conformance with the submission requirements of this RFP.
- Proposals that contain false or misleading statements, or which provide references which do not support an attribute or condition claimed by the proposer, may be rejected.
- The proposals that meet the minimum qualifications will be evaluated and scored according to the criteria indicated below. A minimum of 75 points must be achieved in this phase to be considered responsive. (A responsive proposal is one, which meets or exceeds the requirements stated in this RFP.) A minimum of 5 points must be achieved for each rating/scoring criterion.
- Consulting firms with the highest ranking proposals may be asked to participate in an interview to further assess their suitability for this study.

#### Criteria for WCIRPTDM Contract

| Criteria   | Points   | Points  |
|--|----------|---------|
| (points for each criterion are in parentheses)   | Possible | Awarded |
| <ul> <li>Contractor's Understanding of the Request</li> <li>Clarity and presentation of the proposal (3)</li> <li>Demonstrated knowledge of the required work (4)</li> <li>Identification of any problems related to conducting the study and possible solutions (1)</li> <li>Innovative approaches to the project (2)</li> </ul>  | 10       |         |
| <ul> <li>Project Management</li> <li>Work plan and schedule (1)</li> <li>Appropriate level of effort and staffing by task (4)</li> <li>Procedures to ensure close contact and between the consultant, Caltrans, Technical Advisory Group (2)</li> <li>Internal measures for quality control, timely completion, and cost control (1)</li> <li>Experience with complex presentations to highly diverse audiences (2)</li> </ul>   | 10       |         |
| <ul> <li>Technical Qualifications</li> <li>Experience in technology transfer including training, documentation, writing user manuals, and capability of managing and transferring large digital files (10)</li> <li>Demonstrated knowledge and technical expertise of construction of macro-simulation models using TransCAD software (20)</li> <li>Demonstrated capability through prior experience in developing macro-simulation models in rural areas, particularly areas with a tourism-based economy (10)</li> <li>Study area knowledge and experience (5)</li> <li>Demonstrated knowledge of and experience with project cost estimation (5)</li> </ul> | 50       |         |
| Project Cost  * See below (30)   | 30       |         |
| TOTAL POINTS   | 100      |         |

<sup>\*</sup> Project cost will be scored using the following formula: Lowest Offer Cost ÷ Proposal Offer Cost X 30 = Project

#### VIII. COMPENSATION

• Projects Costs are reimbursable only after they are incurred and paid by contractor. The contractor may bill for reimbursement for tasks completed on a quarterly or monthly basis.

Ten (10) percent of each progress payment will be withheld, pending completion of the Study and the Study evaluation.

#### IX. CONTRACT

The successful consultant will be required to enter into a standard contract with Lake County/City APC specifying the scope of service, completion schedule, and a mutually agreed upon schedule of payment. The consultant will be required to prepare a scope of work (See Section IV) to be inserted into the contract as an attachment. A sample copy of Lake County/City APC's standard agreement is attached. Consultants are responsible for reviewing the terms of the contract.

#### LAKE COUNTY/CITY AREA PLANNING COUNCIL

#### AGREEMENT for PROFESSIONAL SERVICES

#### WINE COUNTRY INTERREGIONAL PARTNERSHIP TRAVEL DEMAND MODEL

This Agreement is entered into on <enter date>, by and between the Lake County/City Area Planning Council, hereinafter referred to as the "APC" and <enter name of consultant>, hereinafter referred to as "Consultant."

#### **RECITALS:**

The APC may retain independent contractors to perform special, technical, expert, or professional services. Consultant is equipped, staffed, licensed, and prepared to provide such services.

The APC is lead agency for the Wine Country Interregional Partnership Travel Demand Model in Lake, Mendocino, Napa, and Sonoma Counties, hereinafter referred to as the "Project," funded by State Planning and Research funds from the State of California, hereinafter referred to as the "State." The APC shall be responsible to State for the successful completion of this Project.

The APC and Consultant agree as follows:

#### 1. WORK TO BE PERFORMED

Consultant agrees to provide those services, tasks and products detailed in Exhibit A, Consultant's proposal to prepare the Travel Demand Model, and Exhibit B, the APC's Request for Proposals dated <enter date>, attached and incorporated herein by reference. Professional services described in Exhibits A and B may be refined or amended by agreement of the APC and Consultant.

Consultant agrees to perform any additional services as may be required due to significant changes in general scope of the project or its design, including but not limited to change in size, complexity, or character. Such additional services shall be paid for by Amendment to this Agreement or by a Supplemental Agreement and shall conform to the rates of payment specified in Section 2 hereof.

#### 2. PAYMENT FOR SERVICES

Compensation for services provided shall not exceed \$ 500,000 on a job completion basis. This shall include compensation for completing the tasks and products identified in Exhibits A and B. Cost overruns and/or failure to perform within the limits of the proposed budget shall not relieve Consultant of responsibility to provide those tasks and products specified in the Exhibits.

The APC shall pay Consultant for work required for satisfactory completion of this Agreement according to the process in Section 3 below. The basis for payment for services shall be on an hourly rate plus non-salary expenses, in accordance with Consultant's Cost Proposal, as attached hereto and made a part hereof in Exhibit A.

#### 3. INVOICES AND DISBURSEMENT

Consultant may submit monthly invoices for work performed. Monthly invoices shall be accompanied by a brief summary of progress to date, segregated by task, as well as documentation of direct costs.

The APC will pay Consultant based on Consultant's itemized invoices for work completed, by task. Total progress payments for each task shall not exceed 100% of the budget for each major task as shown in Exhibit A. The APC will make payments within 60 days of receipt of Consultant's invoices.

Ten percent of each invoice will be retained by the APC. This retention shall be released to Consultant upon acceptance by the APC of the completed work and final report.

If the APC substantially alters the scope of work, the maximum fee may be changed by Supplemental Agreement or an Amendment signed by both the APC and Consultant.

#### 4. REPORTS

Due dates and milestones are detailed in Exhibit A. Preparation of deliverable work products detailed in Exhibits A and B shall be in formats acceptable to the APC. The APC will provide Consultant with guidance on acceptable formats. Consultant shall bear the expense of all printing and reproduction costs until final reports are accepted by the APC.

Consultant shall provide deliverable products in both print and electronic formats as specified in Exhibit A.

#### 5. SERVICES OF THE LAKE COUNTY/CITY AREA PLANNING COUNCIL

The APC shall provide full information as to its requirements for performance of this Agreement, attached as Exhibit B.

The APC shall provide program guidance and appropriate monitoring of work task performance under this Agreement. The APC shall place at the disposal of Consultant all available information pertinent to the project.

The APC will examine all studies, reports, or other submittals from Consultant and will make every effort to provide comments pertaining thereto within ten (10) calendar days of receipt.

#### 6. TERM OF AGREEMENT

The term of this Agreement shall be from <enter date>, to <enter date>. Execution of this Agreement by the APC shall constitute Consultant's authority to proceed immediately with the performance of the work described by Exhibits A and B, provided that evidence of insurance has been received by the APC as specified under Section 11 below.

All work by Consultant shall be completed and all deliverables submitted to and in the possession of the APC by February 28, 2011. Consultant shall not be held responsible for delays caused by circumstances beyond its control.

Consultant acknowledges that timely performance of services is an important element of this Agreement and will perform services in a timely manner consistent with sound professional practices.

#### 7. PROJECT INSPECTION AND ACCOUNTING RECORDS

Consultant agrees that duly authorized representatives of the APC and State shall have right of access to the Consultant's files and records relating to the Project and may review the work at appropriate stages during performance of the work.

Consultant must maintain accounting records and other evidence pertaining to costs incurred, which records and documents shall be kept available at the Consultant's California office during the contract period and thereafter for three (3) years from the date of final payment.

#### 8. OWNERSHIP OF FINAL REPORTS AND PRODUCTS:

All original reports and documents together with such backup data as required by this Agreement shall be and shall remain the property of the APC and State.

Consultant is advised that, according to Government Code Section 7550, which states in part that "Any documents or written reports prepared as a requirement of this contract shall contain, in a separate section preceding the main body of the document, the number and dollar amounts of all contracts and subcontracts relating to the preparation of those documents or reports if the total cost for work by non-employees of the public agency exceeds \$5,000."

#### 9. TERMINATION

At any time the APC may suspend indefinitely or abandon the project, or any part thereof, and may require Consultant to suspend the performance of its services. In the event the APC abandons or suspends the project, Consultant shall receive compensation for services rendered to date of abandonment and suspension in accordance with the provisions of Sections 2 and 3 herein.

It is understood and agreed that should the APC determine that any part of the work involved in the program is to be suspended indefinitely, abandoned, or canceled, this Agreement shall be amended accordingly. Such abandonment or cancellation of a portion of the program shall in no way void or invalidate this Agreement as it applies to any remaining portion of the project.

If, in the opinion of the APC, Consultant fails to perform or provide prompt, efficient and thorough service, or if Consultant fails to complete the work within the time limits provided, the APC shall have the right to give notice in writing to Consultant of its intention to terminate this Agreement. The notice shall be delivered to Consultant at least seven (7) days prior to the date of termination specified in the notice. Upon such termination the APC shall have the right to take Consultant's studies, and reports insofar as they are complete and acceptable to the APC and pay Consultant for its performance rendered, in accordance with Sections 2 and 3 herein, prior to delivery of the notice of intent to terminate, less the amount of damages, general or consequential, if any, sustained by the APC due to the breach of this Agreement by Consultant. Said termination of the Agreement shall not relieve Consultant of its liability to the APC for any damages, general or consequential, which the APC may sustain as a result of Consultant's failure to satisfactorily perform its obligations under this Agreement.

#### 10. RESPONSIBILITY FOR CLAIMS AND LIABILITIES

Consultant shall indemnify and hold harmless the APC and its agents and officers against and from any and all claims, lawsuits, actions, liability, damages, losses, expenses, and costs (including but not limited to attorney's fees), brought for, or on account of, injuries to or death of any person or persons including employees of Consultant, or injuries to or destruction of property including the loss of use thereof, arising out of, or resulting from, the performance of the work described herein, provided that any such claim, lawsuit, action, liability, damage, loss, expense, or cost is caused in whole or in part by any negligent or intentional act or omission of the Consultant, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable. Where Consultant is found to have caused the injury, damage, or loss only in part, Consultant shall hold the APC harmless only to the extent Consultant caused the injury, damage, or loss. The APC agrees to timely notify Consultant of any such negligence claim and to cooperate with Consultant to allow Consultant to defend such a claim.

The APC shall indemnify and hold harmless Consultant, its officers, agents, and employees from any and all claims, suits, losses, damages, costs (including reasonable attorney's fees) and demands, pure economic damages, administrative fees, penalties and fines imposed, and demands, including reasonable attorney's fees connected therewith, on account of personal injury, including death, or property damage, sustained by any person or entity not a party to this Agreement between Consultant and the APC and arising out of the performance of such Agreement to the extent such injury, death or damage is caused by the negligence or willful misconduct of the APC or its contractors or their respective employees, officers and agents.

The APC agrees to the full extent permitted by law, to indemnify, defend, and hold harmless Consultant, its officers, directors, shareholders, employees, affiliates, and subsidiaries and their successors from and against any and all claims, demands, losses, penalties, fines and causes of action of every kind and character (including reasonable attorney fees) arising from or relating to Pre-existing Conditions.

#### 11. INSURANCE

Consultant, at its expense, shall secure and maintain at all times during the entire period of performance of this Agreement, insurance as set forth herein with insurance companies acceptable to the APC for the APC's protection, its elected or appointed officials, employees and volunteers, Consultant and any other independent contractor from any and all claims which may arise from operations under this Agreement, whether operations be by Consultant, by another independent contractor, or by anyone directly or indirectly employed by either of them.

Consultant shall provide to the APC Certificates of Insurance evidencing minimum coverage as specified below:

Vehicle/Bodily Injury - \$250,000 Each Person, \$500,000 Each Occurrence and Vehicle/Property Damage - \$250,000 Each Occurrence.

I. OR

Combined Single Limit Vehicle Bodily Injury and Property Damage Liability - \$500,000 Each Occurrence

**AND** 

General Liability - \$1,000,000 Per Occurrence for Bodily Injury, Personal

#### Injury and Property Damage.

In the event of breach of any provision of this Section, or in the event any notice is received which indicates any required insurance coverage will be diminished or canceled, the APC, at its option, may, notwithstanding any other provision of this Agreement to the contrary, immediately declare a material breach of this Agreement and suspend further work pursuant to this Agreement.

Consultant shall not commence work, nor shall it allow its employees or subcontractors or anyone to commence work contemplated through this Agreement until all insurance required hereunder has been submitted to and accepted by the APC. Failure to submit proof of insurance as required herein may result in awarding said Agreement to another bidder.

Insurance coverage in a minimum amount set forth herein shall not be construed to relieve Consultant for liability in excess of such coverage, nor shall it preclude the APC from taking such other action as is available to it under any other provisions of this Agreement or otherwise in law.

Consultant affirms awareness of the provisions of Section 3700 of the California Labor Code, which requires every employer to be insured against liability for the Workers' Compensation or to undertake self insurance in accordance with the provisions of the Code. Consultant further assures that it will comply with such provisions before commencing the performance of work under this Agreement.

Consultant shall require all subcontractors similarly to provide Workers' Compensation Insurance as required by the Labor Code of the State of California for all of subcontractor's employees.

#### 12. STANDARD OF CARE

The absence, omission, or failure to include in this Agreement items which are considered to be a part of normal procedures for work of this type or which involve professional judgment shall not be used as a basis for submission of inadequate work or incomplete performance.

The APC relies upon the professional ability and stated experience of Consultant as a material inducement to entering into this Agreement. Consultant understands the use to which the APC will put its work product and hereby warrants that all findings, recommendations, studies and reports shall be made and prepared in accordance with generally accepted professional practices.

Consultant will comply with all Federal, State and Local laws and ordinances as may be applicable to the performance of work under this Agreement.

#### 14. NONDISCRIMINATION

During the performance of this contract, Consultant shall not unlawfully discriminate, harass, or allow harassment, against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave. Consultant shall ensure that the evaluation and treatment of its employees and applicants for employment are free from such discrimination and harassment. Consultant shall comply with the provisions of the Fair Employment

and Housing Act (Government Code, Section 12900 et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations are incorporated into this contract by reference and made part hereof as if set forth in full. Consultant shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

In the event of the Consultant's noncompliance with the nondiscrimination provisions of this Agreement, the APC shall impose such contract sanctions as it may determine to be appropriate including, but not limited to:

- 1. Withholding of payments to Consultant under the Agreement until the Consultant complies, and/or
- 2. Cancellation, termination, or suspension of the Agreement in whole or in part.

#### 15. INDEPENDENT CONSULTANT

Both the APC and Consultant agree and acknowledge that the relationship between them is that of public entity and independent contractor and shall in no event be considered that of employer/employee. The APC shall compensate Consultant by payment of the gross amounts due to Consultant, and Consultant shall be solely responsible for any federal, state, and local taxes and withholdings that may be applicable.

#### 16. SUCCESSOR AND ASSIGNMENTS

The APC and Consultant each binds itself, its partners, successors, and executors, administrators, and assigns to the other party to this Agreement, and to the partners, successors, executors, administrators and assigns of such party in respect to all covenants of this Agreement.

Except as noted above, neither the APC nor Consultant shall assign, sublet, or transfer its interest in this Agreement without the written consent of the other, however, Consultant reserves the right to assign the proceeds due under this Agreement to any bank or person.

In the case of death of one or more members of the firm of Consultant, the surviving member or members, shall complete the professional services covered by this Agreement.

#### 17. NOTICES

Notices pursuant to this Agreement shall be served via registered United States mail, addressed to the parties as follows:

Lisa Dave-Bates, Executive Director Lake County/City Area Planning Council 367 N. State St., Suite 206 Ukiah, CA 95482

#### 18. VENUE

The venue for this agreement shall be Lake County, California.

#### 19. EXTENT OF AGREEMENT:

This Agreement and all exhibits made a part hereof constitute the entire Agreement between the parties. In case of conflict or inconsistency between this Agreement and any exhibits, this Agreement shall control. This Agreement shall not be modified except by written agreement of both parties.

IN WITNESS WHEREOF, the parties hereto have caused their duly authorized officers to execute this Agreement in duplicate as of the day and year first written above.

| Lisa Davey-Bates, Executive D<br>Lake County/City Area Plannin |                    | Date                |      |
|--|--------------------|---------------------|------|
| CONSULTANT (consultant must have                               | e two signatories) |                     |      |
| (Type Name)  | Date               | (Type Name)         | Date |
| (Type name of Firm)  |                    | (Type name of Firm) |      |

#### (Exhibit "A" - Scope of Work)

WINE COUNTRY INTERREGIONAL PARTNERSHIP TRAVEL DEMAND MODEL

(Exhibit "B" – Federal Requirements)

WINE COUNTRY INTERREGIONAL PARTNERSHIP TRAVEL DEMAND MODEL

- - 20

#### **GENERAL**

The proposed work will be financed in whole or in part with Federal funds, and therefore all of the Federal Government's statutes, rules and regulations that are applicable will apply, including:

#### AMERICANS WITH DISABILITIES ACT

The contractor must comply with the applicable provisions of the Americans with Disabilities Act (ADA) of 1990, which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA. (42 U.S.C. 12101 et seq.)

#### **DISADVANTAGED BUSINESS ENTERPRISE (DBE)**

This project is subject to Title 49, Code of Federal Regulations part 26 (49 CFR 26) entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs." In order to ensure that the federally mandated statewide overall DBE goal is achieved, participation of Disadvantaged Business Enterprises (DBEs) is encouraged, as defined in 49 CFR 26 in the performance of contracts financed in whole or in part with Federal Funds. The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of subcontracts.

The DBE Regulations in their entirety are incorporated herein by this reference. Attention is directed to the following matters:

- A. A DBE must be a small business concern as defined pursuant to Section 3 of U.S. Small Business Act and relevant regulations promulgated pursuant thereto;
- B. A DBE may participate as a prime contractor, subcontractor, joint venture partner with a prime or subcontractor, vendor of material or supplies, or as a trucking company;
- C. A DBE joint venture partner must be responsible for specific contract items of work, or clearly defined portions thereof. Responsibility means actually performing, managing and supervising the work with its own forces. The DBE joint venture partner must share in the capital contribution, control, management, risks and profits of the joint venture commensurate with its ownership interest.;
- D. A DBE must perform a commercially useful function, i.e., must be responsible for the execution of a distinct element of the work and must carry out its responsibility by actually performing, managing and supervising the work;
- E. DBEs must be certified by the California Unified Certification Program (CUCP). Listings of DBEs certified by the CUCP are available from the following sources:
  - 1. Caltrans' "Civil Rights" web site at: http://www.dot.ca.gov/hq/bep.
  - 2. The Caltran's DBE Directory. This Directory may be obtained from the Department of Transportation, Materiel Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive, Sacramento, California 95815, Telephone: (916) 445-3520;

#### FEDERAL ACQUISITION REGULATION SYSTEM

Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31, et seq., shall be used to determine the allowability of individual Project cost items, and all parties shall comply with Federal administrative procedures in accordance with 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.

#### **NONDISCRIMINATION**

The Contractor (and subcontractors, if any) shall not unlawfully discriminate, harass or allow harassment, against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, denial of family and medical care leave, and denial of pregnancy disability leave. Attention is directed to the following Notice that is required by Chapter 5 of Division 4 of Title 2, California Code of Regulations.

The Contractor (and subcontractors, if any) shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment, and shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated by reference, and are made a part hereof as if set forth in full. The Contractor (and subcontractors, if any) shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

Further, the Contractor (and subcontractors, if any) shall comply with Title VI of the Civil Rights Act of 1964, as amended. Accordingly, 49 CFR 21 through Appendix C and 23 CFR 710.405 (b) are applicable by reference.

#### RECORDS RETENTION

Contractors (and subcontractors, if any) shall each maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of such contracts, including, but not limited to, the cost of administration. Contractors (and subcontractors, if any) shall make such materials available at their respective offices at all reasonable times during the entire Project period and for three years from the date of final reimbursement payment to the County from the State.

#### SUBCONTRACTORS/THIRD PARTY CONTRACTING

No subcontract for a portion of the proposed work and in excess of \$25,000 (excluding professional service contracts of the type which are required to be procured in accordance with Government Code Sections 4525 (d), (e), and (f)) shall be awarded on the basis of a noncompetitive negotiation for work to be performed. Further, subcontracts for over \$25,000 must contain all of the provisions stipulated in this Request for Proposal, to be applicable to subcontractors.

Travel, per deim reimbursements, and third-party contract reimbursements to subcontractors will be allowable as Projects only those costs are incurred and paid for by the subcontractors.

## (Exhibit "C" – State Requirements) WINE COUNTRY INTERREGIONAL PARTNERSHIP TRAVEL DEMAND MODEL

#### **GENERAL**

The proposed work is part of a grant administered by the State of California. All of the State Laws and regulations that are applicable will apply.

# (Exhibit "D" – Summary of Existing Models) WINE COUNTRY INTERREGIONAL PARTNERSHIP TRAVEL DEMAND MODEL

#### **Overview of Existing Models**

| County                 | Napa  | Sonoma   | Lake   | Mendocino   | SF Bay Area  |
|------------------------|---|--|--|---|--|
| Model Name             | Napa-Solano Transportation Model  | Sonoma County Travel Model   | Lake County Integrated Urban + Transportation Planning Model | Ukiah Valley Area Plan (UVAP)   | Baycast-90   |
| Software               | Cube/Voyager  | Cube/Voyager   | TP+  | TransCAD  | Cube/Voyager   |
| Study Area             | Napa & Solano Counties  | Sonoma County (all)  | Lake County (all)  | Ukiah Valley Area   | 9 County San Francisco Bay<br>Area                       |
| Base Year              | 2005  | 2005   | 2010   | 2008  | 2006   |
| Forecast Year          | 2030  | 2035   | 2030   | 2030  | 2015, 2025, 2035   |
| TAZs                   | 1370  | 750  | ~400+  | 259   | 1454   |
| Last update/validation | Validated to year 2000  | Currently being validated  | Recently completed   | Recently completed  | Spring 2008  |
| Next update            | Plans to forecast to 2035, no estimated date  | 2012 (revalidate every 4 years)  | As needed  | As needed   | As needed  |
| Availability           | Solano Transp. Authority = keeper. User agreements required for other use                       | Typically, model runs are done inhouse and output is released to public.   | Yet to be discussed  | Released to County to inform General<br>Plan                            | Open, no restrictions on release of model or source code |
| O-D info, Surveys      | No surveys conducted. Work-trips taken<br>from 2000 Census & compared to #s<br>published by MTC | Data from Bay Area Travel Survey by MTC  | Data from WCIRP O-D survey                                   | Data from WCIRP O-D survey  | 1990 Bay Area household travel survey                    |
| Counts                 | No counts conducted. Work-trips from 2000 Census and MTC  | Utilized count stations owned by Caltrans, Santa Rosa, the County & other intermittent stations from local jurisdictions | Manual counts by Phil Dow: 150 count locations over 7 months | Counts done by consultant in conjunction with local government entities | Count data provided by<br>Caltrans Headquarters          |
| Contact Person         | Diana Vargas: (707) 259-8636  | Chris Barney: (707) 565-5375   | Phil Dow: (707) 463-1859                                     | Phil Dow: (707) 463-1859  | Chuck Purvis: (510) 817-5755                             |

# (Exhibit "E" – Draft Work Plan) WINE COUNTRY INTERREGIONAL PARTNERSHIP TRAVEL DEMAND MODEL

#### Draft Proposed Schedule (Sample)

| Tasks                               |           |  | Fund Source       | FY 200       | 8/09   |               |     |     |     | FY 2009/10            |     |     |          |   |     |         |    |     |          | FY       | Y 2010-2011 |    |          |   |     |          |          |  |
|-------------------------------------|-----------|--|-------------------|--------------|--------|---------------|-----|-----|-----|-----------------------|-----|-----|----------|---|-----|---------|----|-----|----------|----------|-------------|----|----------|---|-----|----------|----------|--|
|                                     |           |  |                   |              | $\top$ | П             |     | П   | Т   | П                     | Т   | Т   |          | T | Т   | $\top$  | Т  | Т   | П        | Т        | Т           | Т  | П        | Т | Т   | П        | П        |  |
|                                     | Sub-Tasks |  | Responsible Party | Total Cost*  | J A    | s             | O N | D . | J F | M                     | A N | 1 J | J        | A | s o | N       | D, | J F | M        | A        | M J         | J  | A        | S | ) N | D        | J        | F Deliverable  |
| 1 Project Scope                     | 1.1       | Scoping Meeting  |                   |              |        |               |     |     |     | ш                     |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Meeting Minutes including description of core structure of the regional  |
|                                     | 1.2       | WCIRPTAG Meetings  |                   | \$15,000,00  |        | +             | _   |     |     | Н                     | +   | +   | Н        | - | +   | +       | +  | +   | $\vdash$ | $\dashv$ | +           | +- | $\vdash$ | + | +   | Н        | H        | network & general model standards, action items, etc.  Meeting Minutes including status reports.   |
| Analysis                            | 1.2       | Wester 1710 Meetings   | l                 | \$15,000.00  |        |               |     |     |     |                       |     | _   |          |   |     |         | _  | _   |          | _        | _           |    |          |   |     | _        |          | Meeting windles including status reports.  |
| 2 Data Collection                   | 2.1       | Data Plan - Data Compilation & Needs                             | Consultant        |              |        | T             |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Meeting minutes summarizing existing data & its adequacy, list of  |
| & Base Year                         |           | Assessment   |                   |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | additional data needed, proposal on trip types, major industrial sectors,  |
| Model                               |           |  |                   | \$20,000.00  |        | $\perp \perp$ |     |     |     |                       |     |     |          |   |     |         |    |     | $\perp$  |          |             |    |          | _ |     |          |          | modal periods, & assessment of modes.  |
|                                     | 2.2       | Collect Field Data   | Consultant        | \$100,000.00 |        | +             |     |     |     | $\vdash$              | _   |     |          |   |     | $\perp$ | _  | 4   | $\vdash$ |          | _           |    | ш        | _ | _   | $\vdash$ | ш        | Inventory of data collected.   |
|                                     | 2.3       | Traffic Analysis Zone System & Roadway<br>Network Dvlpt & Coding | Consultant        |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Fully functional TAZ & Roadway Network for the base year in both   |
|                                     | 2.4       | Trip Generation  | Consultant        | \$50,000.00  | +      | ++            |     |     | _   | +                     | -   | +   | $\vdash$ |   |     | +       | -  | +   | +        |          | +           | _  | $\vdash$ | + | +   | $\vdash$ | $\vdash$ | electronic and hard copy format and all digital files.  Trip rates for the base year including documentation & validation reports.           |
|                                     | 2.4       | Trip Ocheration  | Consultant        | \$15,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Production-Attraction electronic files.  |
|                                     | 2.5       | Trip Distribution  | Consultant        | \$15,000.00  | +      | +             |     |     |     | $\vdash$              | -   | +   | Н        | _ | +   | + +     | _  | +   | $\vdash$ |          | -           | +  | $\vdash$ | + | +   |          | H        | Trip Origin-Destination matrices in electronic format. Report documenting  |
|                                     |           | *  |                   | \$15,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | methodology & adjustments.   |
|                                     | 2.6       | Modal Choice   | Consultant        |              |        | T             |     |     |     | П                     |     | T   |          |   |     | $\top$  | T  | T   | П        |          | T           |    | Ħ        | 7 | 1   |          |          | Mode choice model w/estimates for the base year, in electronic format.   |
|                                     |           |  |                   | \$15,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Report documenting model development.  |
|                                     | 2.7       | Trip Assignment  | Consultant        | \$30,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Network loaded w/peak hour weekday traffic flows in electronic format.   |
|                                     | 2.8       | Model Validation   | Consultant        |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Validated model in electronic form. Fully documented validation procedure  |
|                                     |           |  |                   |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | & adjustments, including implications for model use. List & description of   |
| 3 TAZ & Network                     | 3.1       | Future Year Networks & Zone Structures                           | Consultant        | \$40,000.00  | +      | +             |     |     |     | $\vdash$              | -   | +   | Н        | - | +   | +       | -  | +   | $\vdash$ | _        |             |    | $\vdash$ | + | +   | Н        | H        | input/output files.  Documentation of the projects included in the future year network and the   |
| Development &                       |           |  |                   |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | zone structure. Fully functional & validated TAZ & roadway networks for  |
| Coding                              |           |  |                   |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | future years in both electronic & hard copy format. Documentation of   |
|                                     |           |  |                   | \$25,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | assumptions & methodology used in determining the TAZ systems &  |
|                                     | 3.2       | Trip Generation  | Consultant        | \$23,000.00  | -      | T             | _   |     |     | $\boldsymbol{\sqcap}$ | _   | +   |          |   | _   | 1 1     | _  | _   | $\Box$   |          |             |    | Ħ        | _ | +   |          |          | Trip rates for future years including documentation. Production-Attraction   |
|                                     |           |  |                   | \$10,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | electronic files for each of the future years.   |
|                                     | 3.3       | Trip Distribution  | Consultant        |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Trip Origin-Destination matrices for each of the future years in electronic  |
|                                     |           |  |                   | \$10,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | format. Report documenting methodology & adjustments.  |
|                                     | 3.4       | Modal Choice   | Consultant        |              |        | П             |     |     |     | П                     |     |     |          |   |     |         |    |     | П        |          |             |    |          |   |     |          |          | Mode choice model w/estimates for each of the future years in electronic   |
|                                     |           |  |                   | \$10,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | format. Report documenting the modal choice model development.   |
|                                     | 3.5       | Trip Assignment  | Consultant        |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Network loaded w/peak hour weekday traffic flows for each of the future  |
|                                     | 3.6       | Model Validation   | Consultant        | \$10,000.00  |        | +             | _   |     |     | $\vdash$              | _   | +   |          | _ | _   | +       | _  | +   | $\vdash$ | _        | _           | _  |          | _ | +   |          |          | years in electronic format.  |
|                                     | 3.0       | Model Validation   | Consultant        |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Functional models for future years in electronic form. Fully documented  |
|                                     |           |  |                   | \$30,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | assessment of reasonableness & any adjustments made, including<br>implications for model use. List & description of input & output files for |
| Administration/Coordin              | <u> </u>  |  |                   | \$30,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    | ш        |   |     | ш        | ш        | implications for model use. List & description of input & output tiles for   |
| 4 Accptance By                      | 4.1       | Model Outputs, Presentations                                     | Consultant        |              |        | ПТ            |     |     | T   | П                     | Т   | Т   |          |   |     | ТП      | Т  | Т   | П        | Т        |             |    |          | Т | T   | П        |          | Output for board presentations in a format conducive for public display &  |
| Appropriate                         |           |  |                   |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | examination.   |
| Boards                              |           |  |                   | \$15,000.00  | _      | $\bot$        |     |     | _   | ш                     | _   | _   |          |   |     | $\bot$  | _  | _   | $\sqcup$ | _        |             |    |          | _ | _   |          |          |  |
| 5 Final Model                       | 5.1       | Model Development Training                                       | Consultant        |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Report monthly to Caltrans. Submit all Data files, current model status, &   |
| Documentation,<br>Creation of Model |           |  |                   |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | weekly status updates  |
| Users Manual &                      |           |  |                   |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          |  |
| Staff Training                      |           |  |                   | \$20,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          |  |
| Starr Training                      | 5.2       | Hands-on Training for Macro-Simulation                           | Consultant        |              |        | П             |     |     |     | П                     |     |     |          |   |     | $\top$  |    | T   | П        |          |             |    |          |   |     |          |          | Final documentation, 3 Users Manuals for all TAG Members, training   |
|                                     |           | Model  |                   | \$15,000.00  |        | ш             |     |     |     | ш                     |     |     |          |   |     | $\perp$ |    |     | Ш        |          |             |    | Ш        |   |     |          |          | documents  |
|                                     | 5.3       | Follow-up Consultation, by Phone or in                           | Consultant        | \$15,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             | 1  | l        |   |     |          |          | Summary of Training Provided   |
| 6 Administrative                    | 6.1       | Project Management   | Consultant/LAPC   | ,            |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | Establishing contractual arrangements with CONTRACTOR,   |
| Coordination                        |           |  |                   |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | monitoring consultant work, participating in public events,  |
|                                     | l         |  |                   |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | coordinating all communication & correspondence between  |
|                                     | l         | 1  |                   |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | participating agencies, assist in providing existing relevant data,  |
|                                     | l         | 1  |                   |              |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | reports, & plans, provide timely responses & comments to draft   |
|                                     |           |  |                   | \$40,000.00  |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          | documents, coordinate meetings with WCIRPTAG, processing   |
|                                     |           | TOTALS   |                   | \$500,000.00 |        |               |     |     |     |                       |     |     |          |   |     |         |    |     |          |          |             |    |          |   |     |          |          |  |